General Comments

The Revised International Plan of Action on Ageing: Extended Draft Framework (the "Plan,") continues to be a lengthy document. While recognizing the great difficulty in developing a document which captures the complexities of the 21st century, and which reflects the diverse conditions of older people worldwide, the document may prove more useable if it were more concise.

The Plan is difficult to follow and may benefit from some reorganization, including combining similar ideas that are presented in several parts of the Plan. For example, intergenerational ties and images of aging are described in two different places. The sections on employment and labor and income support may be combined. Careful editing might result in elimination of duplication.

The conceptual introduction to the priority directions (paras #40 and #111) might be better integrated with the actual priority directions. Paragraph 111 of Section IV should be placed at the beginning of the document to explain the purpose of the general framework and to focus the reader. It should also contain some language identifying the role of the various actors in implementing the priority directions, i.e. government, NGOs, private for-profit sector. This could then be elaborated upon in Section IV. Sentences are also very lengthy and include multiple phrases. These are difficult to read and may lead to translations problems.

Committee members also recommend the inclusion of a glossary as terms may have different meanings to different people. For example, "sustainable development" is a phrase that has great implications from economic and environmental standpoints and, for many people, describes the impact on the natural world. Paragraph 91 mentions "the promotion of an enabling environment," which is people centered. In this instance, "environment" seems to have a different definition than many of those working in the environmental field are accustomed to using. Another example is the use of the terms Developed, Developing, Transitional, less Developed and More Developed countries. These terms should be defined.

The draft does a good job in articulating current and future trends and challenges. However, recommendations for meeting these challenges are not evenly and consistently made. Sometimes recommendations are implied and sometimes they are straightforward. Implementor of the recommendations is not always identified, i.e. government. Some recommendations are framed as "coulds" while others are framed as "shoulds."

The draft needs to underscore throughout the increased ethnic, racial and linguistic diversity among populations and the need to develop outreach to these communities through culturally sensitive and appropriate services and service delivery mechanisms.

The draft discusses numerous factors which are essential for successful aging. What is not clearly addressed, however, is the goal of helping people to age in place within their homes and

their communities. This requires national focus on developing coordinated and comprehensive services for the elderly in all communities.

The Plan should promote the need for life course planning which would help older adults to actively live out their later years with economic and health security. Essential components of Life Course Planning include: finances, active aging, health and long-term care, living arrangements and consumer protection. Critical interventions and proactive measures can be identified and adopted throughout life which will enhance physical as well as financial well being in later years. Special emphasis should be placed on the needs of older women, and low income groups.

The Plan needs to more thoroughly discuss the impact of technology on aging - to its potential benefits to older persons and also to the problems it creates.

The Plan should discuss the special circumstances and challenges associated with aging in large urban areas. It should also discuss the special plight and needs of migrant and refugee elderly and of transnational families and the need for long distance caregiving.

The needs of older people in rural areas should be addressed throughout the document, not just in specific areas such under sustained development. The Plan also needs to discuss the need to create social and health related safety nets for the rural elderly.

The Plan should discuss the fact that, in many countries, individuals with developmental disabilities are living into old age. Governments need to be made aware of this fact and to develop policies and programs that will allow them to grow old with dignity and care.

I. Strategy For A Society For All Ages

The Demographic Revolution

The Plan, starting with the demographic section, needs to more strongly delineate the broad range of ages which the term "elderly" encompasses, from the young 55-60 to the very old. Generalizations about those 60 and over tend to mask important disparities between subgroups.

While the draft indicates that most elderly will continue to live in rural areas, this important fact should be emphasized by inclusion of a graph in the demographic section.

Policy Implications

While #13 and #14 address special concerns of older women, the entire Plan, and especially this section on Policy Implications, should highlight the fact that women in general are outliving men. Women age 85 and older are more likely to have health problems, to have a greater need for health care and other services, and to have a higher incidence of poverty. Their plight should be highlighted throughout the document.

#14, last line. This should be changed to "the public role of government is critical in providing..."

#15. This area should be retitled Universal Design, which would include the notion of accessibility and mobility. Universal design is a key element in making the environment safer and more agreeable to all age groups, including the elderly. The Plan should encourage governments to play a vital role in supporting universal design in products, housing and communities. Older persons should have the opportunity to live, work and enjoy recreational and cultural opportunities unimpeded by barriers in homes, workplaces, infrastructure or community facilities.

Another key element in being able to age in place is the ability to get around outside the home. Governments should be encouraged to create policies and programs that make it easier for older people to get to goods, services and friends. In countries where older people drive, they often can drive longer than they can walk or use public transportation. Therefore, every effort should be made to improve land use policies to enable older people to drive, walk or have easy access to needed activities. Policies should be encouraged to allow older people maintain their mobility through driving as long as safely possible and to offer other mobility options for those who cannot or do not drive. Governments should be encouraged to develop new kinds of vehicles, to design safer roadways, to create transportation alternatives, such as walkable communities and neighborhood serving businesses, and to use new technology.

Add #20. This section, Policy Implications, should contain a section on the changing nature of work and its impact on older workers. A number of powerful economic and social forces - revolutionary technology and information progress, an historic graying demographic shift, global trade - are bound to alter work and the workplace in the 21st century. The criteria for participating in the 21st century workforce is evolving. Today, many new skills are required by jobs in the growth industries. Among other factors, the actual acquisition of new skills will determine individual roles in the workforce.

For many older people worldwide, these trends present an altered view of the work years, old age, and what it means to retire. Many aspects of these changes will be rewarding to older people. For others, especially for older people in countries in transition, the challenge will be to assure that safety nets are in place. The challenge for all will be to ensure an attitudinal change about the contributions of older people and to codify their strengths and continuing contributions both in the family and in work.

Toward An Integrated Society

#30, line 9. "to get value for their work." This needs to be changed to reflect both paid and non paid (volunteer) contributions.

#33. Committee members disagree with the statement that "In the developed countries, poverty in old age has largely been defeated..." In the United States, poverty levels as a whole have declined for people over 65, there are still pockets of poverty. These include many older women, minorities, the oldest old, the rural elderly and those living alone. Perhaps the Plan needs to address, if the data are available, to what extent and in what parts of the world, the poverty rate for older persons is greater than the poverty rate for the youngest segment of the population, as well as comparative data on poverty rates among older men and women, for an example.

Integrating policy action

#34, line 4. Change to "global, national **And local** levels."

#36, first sentence. Rewrite as "...profound, and Far reaching influence..."

II. Conceptual Introduction to the Priority Directions

#42. This list appears to somewhat duplicate #38.

#46. The Plan should encourage a clearer message emphasizing the need to support family members and others who assist those who need help in order to remain living at home. Paragraph 46 would contain the following changes:

Add: "and support" in line two after "build on."

Delete: "and" in line 8 to read "... care, social protection, caregiver support, and assistance

those with impairments in activities of daily living."

III. Priority Directions For Policy Action: A. Sustaining Development In An Ageing World

Poverty Alleviation

for

This section should reflect the fact that there is a wide disparity among the older population in terms of economic well being and the risk of poverty.

Productive Ageing (#54-58)

This section confounds active and productive aging, which as defined in the Plan, are not necessarily the same. Sections on productive aging could continue as part of Poverty Alleviation.

Active Aging should have its own section related to Productive Aging. The Plan should promote the concept of "active" aging to reinforce the human potential in the later phases of life, whether it be a contribution to personal growth or to the family and community.

In addition to the ability to continue work, older people should also be seen as a valuable resource in the community through volunteer service. More needs to be done to alert older persons to the need for their services and to involve them in volunteer activities, especially in the area of assisting those elderly who are at risk of losing their independence and in intergenerational activities. Governments and non-governmental organizations should be encouraged to develop volunteer programs for the elderly. The United States government has established volunteer opportunities that benefit from the diverse talents of older Americans. These may serve as models to other countries. Programs are under the auspices of the Administration on Aging in the U.S. Department of Health and Human Services, the National Senior Service Corps in the Corporation for National and Community Service, the Senior Corps of Retired Executives in the Small Business Administration, the Environmental Protection Agency, the National Park Service's Volunteers in Parks and the United States Peace Corps.

Another important component to Active Aging is the need to change perceptions about life-long learning experiences and to better understand how adults learn. The Plan should encourage governments to lead the way in supporting lifelong learning and to view older adults as positive contributors to society rather than as drains on scare resources. Lifelong learning may be for personal fulfillment or for professional retooling and growth. Lifelong learning spans adult literacy to college education. Increased educational opportunities should be targeted to low income, rural and mobility restricted adults in their homes and in care settings. Lifelong learning should be included as a part of any pre-retirement seminars or materials.

Employment And The Ageing Labour Force (#59 - #61)

The Plan should encourage the development of policy choices for legislation which are based on best-practice theoretical and empirical methods, including models that forecast the consequences of policy changes for the economic well-being of older people and that demonstrate their work and savings behavior.

The Plan should encourage governments to develop public policy that supports continued training and reskilling and that envisions a future workforce in which skill renewal is the norm, not the exception.

The Plan should encourage countries to learn from one another and share models in employing seniors and for the development of vocational training for experienced workers so they may sharpen existing skills or retrain to remain current with new job market demands.

Governments should identify and eliminate legal and other barriers and disincentives to employment of older persons. These may include: financial disincentives to work, problems in the job market, work place discrimination, inadequate training and younger retirement ages. The Plan should also discuss and encourage the development of child care and elder care programs in the workplace.

The Plan should more clearly encourage development of micro-enterprise activities for elderly, especially those that include older women.

While the Draft has made a good start at considering ways of retaining older workers, it also needs to address issues of work to retirement. These issues were addressed in the original plan in Recommendation #40 and should be reconsidered for inclusion. In addition, governments play an important role in educating older workers about the financial aspects of retirement.

Literacy And Education (#62-64). This section should be connected to the sections on Productive and Active Aging and should, perhaps, be renamed Lifelong Learning.

The Plan should encourage governments to design more precise ways of tracking elder learning and other adult activities. Research is needed to ascertain the positive effects of continued learning in improving the quality of life and improved health status.

Rural Development (#65 - 67). This section should be broadened to include the development of health and social services for the rural elderly. It should also encourage the development of accessible transportation. The following language is suggested:

"Accessible transportation, including voluntary transport services, inter-community transport for shared services, or other systems should be developed to assist older people remain living in their communities."

B. Advancing Health And Well-Being Into Old Age.

#71 - 73. This section should contain specific reference to older women, who often face the double or triple jeopardy of discrimination due to gender, race and age. Governments should promote educational programs to improve images of older women.

#78, line 2. We question the statement that "mental health almost inevitably diminish (es) with progression towards later stages." Does this mean that older people have more mental illnesses or dementia?

Mental health issues deserves a section on its own. According to the U.S. Substance Abuse and Mental Health Administration, US Department of Health and Human Services, "mental illness is the second leading cause of disability worldwide and a significant concern with regard to older adults." Due to the aging of the population worldwide, a significant increase in the number of individuals with lifelong chronic mental illness who are over the age of 65 can be expected. At the same time, the later years of life often bring with them significant life changes (e.g., retirement, death of loved ones, physical impairments). Many older people have also survived harrowing events such as disasters, wars and relocations. These mental health problems are not an inevitable outcome of growing old, yet they have significant potential for reducing the quality of life among the elderly worldwide. Nations should actively work to develop systems of care

that address the unique mental health needs of older adults, ranging from prevention and early intervention to provision of treatment services for those with serious mental illness.

Steps should be taken to actively prevent medication misuse, to the extent possible. The growing use of pharmacologic treatments for a range of disorders and the disproportionate use of medications by people over the age of 65 leave this segment of the population at significant risk for medication misuse and abuse. Nations should develop plans to increase the education and awareness of older adults, family members, physicians, other health care providers and social service providers about the risk of medication interactions, including interaction with alcohol.

Mental health comments should be linked to the mental health strategies being developed by the World Health Organization.

#79. To reduce the high cost and reduced quality of life associated with early institutionalization, an emphasis should be placed on community-based long-term care. The following language is suggested as a second paragraph under #79:

"The primary concern for most older people is losing independence and becoming a burden to others. However, the disability that accompanies chronic progressive disease often forces individuals from their homes into institutions. Health care systems need to be improved so that they target rather than avoid persons with advanced, progressive disease. Accessibility to community-based long-term care may reduce hospitalizations and delay nursing home placement, thereby providing better care and quality of life without an increase in health care cost."

#80. This paragraph appears to belong with the following section on Access to Healthcare.

Access To Healthcare And Elimination Of Inequalities

#81. Barriers also include race, ethnicity, gender and language.

Primary Health Care

- **#84.** The Plan should recognize the value of telemedicine in diagnostic consultations, medical data transmissions and management of chronic illnesses. Nonclinical applications include continuing health professional education, administrative meetings and health care demonstrations.
- #85. The last sentence seems redundant as it is discussed in #88. In connection with disabilities, the Committee recommends that a separate section be developed to discuss the issues related to disabilities in old age and the implications of lifelong disabilities.
- **#86**. Professionals should be exposed to a full range of older people in terms of health status-from the fully independent and well to patients confined to bed with serious illness. All health care workers should have the experience of serving older people in their homes.

#88. While the goal of health promotion and development across the life course is a major goal of the Plan, there needs to be more discussion of how the goals will be achieved.

The Plan should focus on *prevention* as the key to extending good health during the middle and later years by implementing existing, effective and commonly available preventive practices and services (such as blood pressure screening, exercise, smoking cessation, safe driving, immunizations, nutrition, home safety, cancer screenings, prescription drug safety, and ensuring social networks).

The Plan should place emphasis on *home and community-based services* in which health care structures promote the ambulatory long-term management of chronic care including medical, social, and supportive services.

The Plan should acknowledge the moral and ethical consequences of technology's prolongation of life. End of life issues should be discussed, including living wills, and advanced directives.

The Plan should propose steps that may be taken to both reduce environmental pollution and to protect the elderly from its affects. Everyone is exposed to one or more forms of pollution, whether it is air, water, or soil contamination, indoor smoke or a tainted food supply. However, children and the aging are especially susceptible populations that are far more likely to be affected by even the smallest pollution levels. Both the short and long term consequences of this are serious, not only in terms of human health but for their economic effects. The aged who continually breath polluted air or drink unsafe water may require increased medical care, driving up health care costs and further stressing the system in providing adequate coverage to the aging population. Medical conditions arising from environmental pollution can reduce productivity and affect the quality of life of older people. It is important to minimize exposure of people from childhood on throughout their lives in order to contribute to their healthier old age.

The Plan does not discuss the importance of adequate food and good nutrition in assuring the maintenance of good health. Older persons, due to the many environmental, social, economic and physical changes of aging, are at disproportionate risk of poor nutrition that can adversely affect their health and vitality.

Scientific evidence supports the relationship between good nutrition, health, and functionality. Four of the ten leading causes of death and disability (heart disease, cancer, stroke, and diabetes) among older adults are tied to poor nutrition. A decline in cognitive functioning and a reduction of the risk of coronary artery disease are linked to adequate intake of vitamins B6, B12, and folic acid. The prevention and treatment of osteoporosis and the maintenance of mobility are tied to the consumption of adequate amounts of calcium and vitamin D. Evidence indicates that the development of blindness due to cataracts or age-related macular degeneration may be retarded if there are adequate amounts of the antioxidants -- vitamin E, beta-carotene and other carotenoids, and ascorbic acid -- in diets. Research has also found that antioxidants may play a role in the prevention of central nervous system disorders such as Alzheimer's, Parkinson's Disease, and

atherosclerosis. Obesity caused by the interaction of poor nutrition and lack of physical activity decreases mobility, increases the risk of chronic diseases and disability and ultimately decreases the life span.

C. Ensuring Enabling And Supportive Environments For All Ages

While the topics discussed in this area, such as housing and caregiving, are elements in a supportive environment, the Plan needs to emphasize the importance of developing integrated, community-based systems of care and support to the elderly and to their families.

Income Support And Social Protection (#93-95)

The Plan should address the inability to work or a reduction in that ability because of a health-related impairment. Mixes of private and public programs can mitigate this risk to work and income. Creation of disability programs can ameliorate the risk during working years, and retirement programs ensure that the transition from work to retirement is smooth and that income after retirement is secure. Part of the safety net that needs to be developed in all countries is public and private pension plans that can guarantee minimum income for livelihood that is not subject to severe financial fluctuations.

The Plan should include language which would encourage bi-national social security agreements to allow older people to receive their benefits while residing in another country.

#97. Housing And Living Arrangements. The Plan should encourage the support necessary to insure older persons a decent quality of life and the ability to stay out of more institutional settings. Housing for older persons needs to be physically supportive; linked with services; respect the autonomy, dignity and privacy of its residents; affordable; allow for aging in place; and encourage sociability.

The Plan should encourage the development of housing options for older people. It should make note that in many countries there are quickly expanding housing opportunities i.e. personal care homes, sheltered housing, residential care, homes for adults, managed care, catered living, board and care, and domiciliary care and encourage these as alternatives to nursing homes. The Plan should also encourage the linkages between facilities which house the elderly and home and community-based supportive service networks to assure that living arrangements and long-term care needs are integrated.

#98. Access to transportation to goods and services for both well and disabled older persons is an issue not only for suburban elderly but for those living in rural areas.

Care (#100-103)

The Plan should go further in suggesting ways that governments can support caregivers, whether it be for spouses, adult children, or grandchildren. Some recent initiatives in the United States may serve as models for other countries and could be reflected in the revised Plan.

- 1. The reauthorized Older Americans Act includes a new section to provide support to caregivers. Caregivers have identified the following services as critical components of a caregiver support system:
 - Provision of information to caregivers about available services;
 - Assistance to families in gaining access to such services;
 - Individual counseling, organization of support groups, and provision of caregiver training to help families make decisions and solve problems relating to their caregiver roles;
 - Respite care to enable families and other informal caregivers to be temporarily relieved from their caregiving responsibilities; and
 - Provision of supplemental long term care services, on a limited basis, to complement the care provided by caregivers and other informal caregivers.

The Plan should also reflect that the needs of dementia caregivers vs non-dementia caregivers may be quite different. The strains and needs of both groups of caregivers should be acknowledged yet clearly distinguished to: 1) accurately identify how best to assist caregivers in each group since their stressors, perceived stress, and resulting needs may differ and, 2) more accurately estimate the demand for long-term care and caregiver support services, both types and amount.

2. Increased Recognition of Caregivers.

The Family and Medical Leave Act (FMLA) ensures that businesses address the elder care needs of their employees. The Act applies to all public agencies, including State, local governments, and Federal employers; and to private sector employers who employ 50 or more employees for at least 20 workweeks in the current or preceding calendar year. The FMLA entitles eligible employees to take up to 12 weeks of unpaid, job-protected leave each year with continued group health insurance coverage during the leave for specified family or medial reasons.

The week of Thanksgiving has been designated by the President as National Family Caregivers Week, a period set aside for the nation to honor and support the daily contributions of family caregivers.

3. Grandparents Raising Children

While the draft acknowledges the increasing role of grandparents raising grandchildren, it should encourage the development of policies, practices and services that reinforce the positive role of grandparents raising grandchildren while also reflecting on the obstacles and barriers affecting their ability to raise their grandchildren.

#100. While there are specific references to older persons having the "...sole responsibility for caring for sometimes several frail children and grandchildren" when the parents have died of AIDS, the Plan offers no recommendations for action. The Plan should encourage governments to provide the resources and services to assist the elderly in effectively assuming this role.

Protection Against Abuse And Violence (#104-105)

When older people are victimized, they usually suffer greater physical, mental, and financial injuries than other age groups. Elderly victims are twice as likely to suffer serious physical injury and to require hospitalization than any other group. Furthermore, the physiological process of aging brings with it a decreasing ability to heal after injury - both physically and mentally. Elderly victims may never fully recover from the trauma of their victimization. Also, the trauma that they suffer is worsened by their financial difficulties. Because many elderly people live on a low or fixed income, they often cannot afford the professional services and products that could help them in the aftermath of a crime.

Thus, many older people may need advocacy on their behalf because physical or mental disabilities, social isolation, limited educational attainment, or limited financial resources prevent them from being able to protect, or advocate for, themselves. Entire communities must work together to prevent abuse, fraud and other crimes against the elderly.

This section should be broadened to encourage governments to better protect older persons from abusive situations, ranging from financial exploitation to severe neglect and/or abuse in their homes or in institutions. The revised Plan should encourage:(1) coordination among service systems and disciplines (including law enforcement officers, fireman and social services) to prevent elder abuse and combat crimes against the elderly; (2) sensitivity and knowledge of victim advocates about the dynamics, laws, and social and protective services programs pertinent to victims of elder abuse and neglect; (3) public awareness of elder abuse and the seriousness of crimes against the elderly; (4) evaluation of institutions (i.e. nursing homes) on a regular basis to assure that the residents are not physically or mentally mistreated or neglected; and (5) public education of the elderly to enable them to avoid being victimized, abused, or exploited.

#110. Older Persons In Emergency Situations. The main issue is NOT to ensure that older people have the same accessibility to relief services as accorded other groups. Older persons may have special needs during "man-made" as well as natural disasters. Part of the reason for older persons needs being ignored is because service providers do not know that they have a special needs. Older people often have difficulty obtaining necessary assistance because of progressive physical (such as hearing loss) and mental impairments and other frailties that often accompany aging. They may not react as quickly as younger people and are often slower to register for disaster assistance, if it is available. They may be at higher nutritional risk in the aftermath of a disaster and may forget to take necessary medications. Medications may also cause confusion in an older person or a greater susceptibility to problems such as dehydration. They are often targeted by fraudulent contractors and "con men" that follow disasters and financially exploit disaster victims. Older people in disasters may be susceptible to physical and

mental abuse as family stresses increase in later stages of the disaster. Multiple losses, such as loss of spouse, income, home, and/or physical capabilities, compound each other. Disasters sometimes provide a final blow making recovery particularly difficult for older persons.

Because of these, and other potential problems, the Plan should encourage governments to develop special guidelines and programs for assisting older people during times of disaster. This would include disaster preparedness, special training for relief workers, availability of services and goods, such as special foods and wheelchairs, for the elderly.

While reestablishing income generating capacity of older persons is of high priority in the aftermath of emergency situations, the Plan needs to more broadly address the recovery stages of disaster. It should encourage governments to consider ways to help older persons reestablish family and social ties, psychological well being and to ensure that they have adequate clothing, food, and shelter.

IV. Preparing To Meet The Challenges Of Ageing

<u>National Action:</u> Role of Governments, Actors and Partners (This is unclear. Governments are also actors). This should be rewritten, perhaps as "Governments and their Partners."

- **#112**. While "mainstreaming" aging into national agendas is vital, special programs devoted solely to advocating for and providing services to the elderly is also important at the national level.
- #113. "State-wide participation in international activities" is not clear and needs to be explained.
- #115. Sentence beginning "Participation of private sector..." through "...basic human rights." The intent here is unclear. What happens when such cultural values conflict with human rights? Why should only the private sector be guided by these principles? "Accessibility and affordability" of what?

Improving the Health and Well-Being of Older Populations

Some Aging Research Recommendations

INTRODUCTION

Throughout the world, populations are aging at an unprecedented rate. The United Nations (UN) projects that shortly after the year 2010 there will be more people over 65 years of age in the world than children under the age of five. By 2050, the UN projects that 18 percent of the world's population will be 65 years of age or older, versus only five percent under five years of age. The main factors driving this demographic shift are increasing life expectancy, declining fertility, and the progressive aging of older cohorts. This pronounced demographic trend, of global importance and as yet unknown consequence, gives strong impetus to an international focus on the implications of population aging for health and long-term care systems as well as family support, living arrangements and caregiving.

There is an urgent need to help older people maintain the highest degree of function and quality of life for the longest period of time. Elderly individuals experience disability at twice the rate of working-age individuals (45-64 years old) and four times the rate of the younger working-age cohort (18-44 years old). However, research has shown that remaining independent, healthy, emotionally vital, and engaged until advanced ages is a realistic expectation. Aging research has made significant strides in revealing the underlying processes that help determine longevity and the risk of disease. These advances are fueling health promotion and an optimism in attaining a successful old age.

Into the future, there will be a growing awareness that decline, disability, and frailty are not the inevitable consequences of aging. New positive images and models about what it means to grow old will emerge. We have invested billions in postponing disease and extending life expectancy, but very little in creating the physical and social environments and technological and public policy infrastructures that support longer life. The net result of this paradox is that we are living longer and are not prepared for it. Research conducted in these areas will translate into environments that enable older adults to maximize their physical and cognitive functioning, thereby extending active life expectancy. Advances in health care will improve the effectiveness of health prevention efforts with older persons, provide more effective models of care for chronic illness, and improve therapeutic options for illnesses and conditions prevalent in older persons. Innovations in health care treatment, communication, assistive technology, information technology, transportation systems, and housing environments can make a significant difference in the health and quality of life of future generations. However, this will require that all individuals have access to high quality health care services and are able to benefit from these advances.

The elderly population will grow more diverse in terms of health status, resources, and ethnicity. Many older persons will remain independent and active for longer periods. At the same time the needs of elders with disabilities will create enormous demands. Individuals from racial,

linguistic, or cultural minority backgrounds are more likely to live in poverty and to lack adequate nutrition, health care, access to preventive care, and health information. These populations experience a higher rate of chronic disease and disability. In conducting research, we must be cognizant of the diversity of the older population and the special needs of ethnic and religious minority elders, those living in rural areas, and other vulnerable populations such as those who are illiterate. These populations must be included in on-going research and inform the research process.

BIOMEDICAL RESEARCH

Efforts must be intensified to prevent or delay age-related diseases and disabling conditions such as Alzheimer's disease, cardiovascular disease, cancer, and musculoskeletal disorders. All of us stand to gain from the prospect of healthy, fully engaged older populations: these include the rapidly growing numbers of the aged, those they care for and who care for them, and all who will join these groups in the future.

Research on the biology of aging has led to a revolution in understanding the cellular and molecular changes that occur with aging. This new gerontology investigates the progressive biological and physiological changes that normally occur with advancing age and the abnormal changes that are risk factors for or accompany age-related disease states. We need to gain a fuller understanding of the gradual changes in structure and function that occur in the brain and nerves, bone and muscle, heart and blood vessels, hormones, nutritional processes, immune responses, and other aspects of the body. We need further research into the biologic factors associated with extended longevity in humans and animal models. The ultimate goal of this effort is to develop interventions to reduce or delay age-related degenerative processes in humans.

Health Services Research

By applying new knowledge we can accelerate the decline in age-specific rates of disability, improving quality of life for older persons. Enormous gaps exist in our knowledge of how best to organize, finance, and deliver health care services as well as how to implement existing knowledge in clinical practice.

There is an opportunity to support, conduct, and disseminate research that will enhance our understanding of the complex relationships between health policy, organization and financing of health care services, clinical practice, patient preferences, and health outcomes in "real world" settings so that both policy and practice can be shaped by objective evidence about what works. Older people need access to high quality primary care. We need to learn how to create a seamless continuum of health services for older persons including preventive, acute, chronic, rehabilitative, and long-term care services. We need to both accelerate the translation of new knowledge into practice and learn how to encourage individual patients to be active partners in their care.

Delivery of care

There remain tremendous gaps in our knowledge of how to treat the geriatric patient. The care can be very complex, and requires management of chronic conditions, co-morbidities, functional disabilities, and mental health, as well as attention to psychosocial issues. Currently, many well-established approaches such as prevention of falls, geriatric assessment, incontinence management, to mention a few, are not generally part of current practice. New models of primary care that serve as a focal point to integrate services over the continuum of care need to be developed. These models need to address the special needs of older women and ethnic minorities. The contribution of health care toward eliminating socioeconomic and ethnic disparities in health needs to be better understood. We need new strategies to foster implementation of evidence-based care.

Quality

A major challenge will be improving access and quality of heath care in the face of the cost pressures associated with the aging of the baby boom population. New methods to measure and improve quality of care for older persons are needed. We need to find ways to assure that we invest in technological change and evaluate it for its impact on quality as well as cost. As health care markets change rapidly it is important to monitor and evaluate these changes thoroughly.

BEHAVIORAL AND SOCIAL RESEARCH

Research is needed to maintain or enhance the health and well-being, including physical and cognitive function, of individuals throughout the life span. For example, in addition to lifestyle factors, we need to examine environmental and systems-level influences that also impact health and well-being in old age. We need to develop new interventions to encourage long-term changes in health behaviors that will lead to reduced risk of disease and disability. Interventions are needed to maintain cognitive function and retain independence. Components of the physical environment need to be redesigned to match the skills and abilities of older persons, thus helping to prevent injuries and to improve performance of daily activities. Such human factors research produces new and improved medical devices and treatment regimens, instructional designs, and product labeling. As more older people are able and willing to work well into late adulthood, research is needed on the physical and social barriers to their sustained participation in the workforce and the factors needed to enhance their skills and productivity.

The problem of providing appropriate care for those older persons who need it becomes critical as changing family structures result in fewer children to care for aging parents. We must explore different models of health and long-term care, including the expanded use of home and community-based services and assisted living arrangements.

Population Health

The U.S. and most industrialized countries have seen dramatic increases in the life expectancy of their older populations over the last few decades, and several countries (the U.S., France, and Italy) have clearly documented decreases in elderly disability rates. There is a great need for the wider collection of comparable data to measure rates of old-age disability, to monitor changes in the health and functioning of older populations, and to implement policies, and design and/or refine programs, to foster further improvements. Consistent measurement and data collection strategies must be developed to allow comparisons across countries, to promote preventative health strategies among older persons, and to plan for age-related health and long-term care needs. We must support international efforts in data collection and analytic research throughout the world.

For many countries, the simplest facts about the burden of disease are not known. We must support the development of health information infrastructure, including investments, both domestic and international, in primary data collection at the individual, health service provider, and local community levels. Coupled with technological advances in the measurement of health and well-being, these investments have provided scientists with a wealth of knowledge about the social, economic, and health impact of changing age structures and disease progression across multiple contexts.

One of the most important innovations in recent years has been the increasing use of biomedical methods -- and the collection of biomarker data -- with self-reports in large-scale population studies. The value of longitudinal population surveys and surveillance data for scientific and policy research is clear as these studies have provided prevalence and incidence estimates of health conditions, as well as an understanding of health inequalities, behaviors that are associated with improved health, and the impediments to adoption of those behaviors. Bringing together complementary approaches for gathering sound data builds a solid foundation of the evidence base that gives decision-makers added confidence in the emerging information.

Health Promotion

While research is necessary in many areas to expand our current knowledge, we already know that disability among older adults can be reduced by up to a decade when older adults adopt healthy lifestyles, including regular physical activity, improved nutrition, and smoking cessation. We also know that certain strategies can prevent osteoporosis and falls, which can lead to catastrophic injuries among older adults, and pneumonia and influenza, leading causes of death world-wide. Known effective strategies are not being adopted widely because we do not understand fully the behavioral and social factors involved, especially those unique to older adults of different cultural backgrounds. Adequately addressing this applied research agenda would greatly enhance our ability to meet these unmet prevention opportunities.

TECHNOLOGY AND SYSTEMS-LEVEL RESEARCH

It is not enough to focus our research efforts on improving the health status of elderly individuals around the world. Increased attention must also be paid to the role of the environment and

systems-level factors in promoting health, independence and active engagement. What is needed are studies of the dynamic interplay between persons and environments; of the adapting process, by the society as well as by the individual; and of the adaptive changes that occur as a person ages. The aging of the population in conjunction with quality of life issues dictates a particular focus on prevention and alleviation of co-existing conditions and on health maintenance over the lifespan. This focus includes research on the development and evaluation of environmental options in the built environment and in the communications environment. In developing these options, researchers will need to incorporate universal design principles and the use of assistive technology. Such research will lead to a better understanding of the context and trends that affect the total environment in which older individuals and populations live and in which age-related diseases and disabling conditions will be manifested. These include economy and labor market trends; social, cultural, and attitudinal developments; and new technological developments. Research must also develop ways to enable older individuals to continue to compete in the global economy, including lifelong education and training methods and assistive technology.

Moreover, the identification of significant sociodemographic variations in the distribution of agerelated diseases and impairments and in the prevalence of disability among older populations challenge the aging research field to expand our frameworks beyond individual characteristics to focus on technology and the potential mediational role of the environment. Just like health habits and other personal characteristics, environmental factors may be enabling or disabling for the health of older adults. For example, the environments in which older adults live and work and receive services may be physically accessible or inaccessible, culturally inclusive or exclusive, accommodating or unaccommodating, and supportive or unsupportive. Researchers should explore new ways of taking into account the effects of physical, social, and policy environments on the dynamic nature and quality of aging.

Technology is fast becoming a major factor in determining whether environments are supportive of the health and well-being of older populations. The key question before us is how can we harness the potential of technology to address the primary challenges of aging societies and the needs and preferences of older adults? These challenges and needs include: safe and affordable housing, innovative and affordable health care solutions, accessible transportation, personal communication and social supports for caregiving, and re-engineered work environments to accommodate the increasing number of older workers. To respond to these challenges we need to promote research on "age-friendly" and "disability neutral" environments that mitigate against the circumstances that force seniors to age "pre-maturely" and move into institutional settings.

Finally, at a public policy level, researchers must cultivate a better understanding of the social and political contexts in which the needs of older populations are addressed, ignored, or exacerbated. General fiscal and economic policies, as well as more specific policies on delivery and financing of health care, income support, social services, transportation, employment, education, telecommunications, institutionalization, and long-term care are critical factors influencing the health and well-being of the elderly. Their frequent inconsistencies, contradictions, and oversights can inhibit the attainment of personal and societal goals for older individuals and populations.

RESEARCH TO PROMOTE PREVENTION OF ELDER ABUSE AND NEGLECT

Although research has found ways to help us live longer, it has not yet taught us how to prevent elder abuse and neglect. Elder abuse and neglect comes in many forms – including physical, psychological, sexual, financial, self-neglect, and substance abuse. It can occur in community and institutional settings as well as at home. Although there are varying reports about its incidence, there is general consensus that it is vastly underreported. A recent study – one of the few in this area – concludes that abuse and neglect significantly shorten the older victim's life. Mistreatment that many would perceive as minor can have a debilitating impact on the older victim and is especially devastating for the low-income older person. Indeed, a single episode of victimization can "tip over" an otherwise productive, self-sufficient older person's life triggering a downward spiral leading to loss of independence, serious complicating injury or illness, and even death.

Rigorous academic research is needed to measure, understand, prevent, and redress elder abuse and neglect of all types. As a threshold matter, we need biomedical research, for example, on what types of fractures, bruising, malnutrition, dehydration, and decubitus ulcers are signs of elder abuse or neglect as distinguished from medical problems caused by other factors. Such research is necessary to enable those who come in contact with older people to know what to look for – to detect, diagnose, and report suspected elder abuse and neglect – and to know when to ask more questions. Additional medical research is needed to study its signs, causes, risk factors, and treatments.

Until we know the incidence and prevalence of elder abuse and neglect, it will be impossible to craft social programs for prevention and treatment. Similarly, we need social and behavioral research to measure the social, financial and human costs of elder abuse, who is at risk, what types of interventions and prosecutions work, and how we should train and support caretakers and health care, social service, public safety and law enforcement personnel to prevent it. In addition, where there are shortages of the staff (primarily nurses and certified nurses aides) who provide residential health care, and those shortages result in patient neglect, it is important to study effective methods of recruiting and maintaining staff.

Validated evaluation components should be included in programs intended to combat elder abuse and neglect to measure their effectiveness. In this way, we will begin to create a body of literature that will better inform and support the fight against elder abuse and neglect of all types. We also should attempt to address and quantify the impact of destructive presumptions such as that "old people will die soon anyway so it's not necessary to address elder abuse and neglect." Such attitudes cause older victims suffer twice: once from the abuse or neglect itself; and a second time from the inadequate or nonexistent response to their suffering due to a lack of detection, treatment, intervention, and prosecution.

There also is great potential for technology in this area. Forensic centers have been very useful in diagnosing and prosecuting child abuse. Given the paucity of forensic expertise in medical aspects of elder abuse and neglect, development of a national or international forensic center on elder abuse and neglect – accessible to medical practitioners and others by telemedicine and email (sending labs, x-rays and other medical records) – could be tremendously useful in allowing broader access to the currently small group of experts.

OLDER POPULATIONS IN RURAL AREAS

The health of older populations in rural areas differs significantly from that of their urban counterparts. Rural populations have poorer health, higher rates of disability, higher rates of poverty, and significantly less access to needed services. This results in a greater need for health care, but a restricted ability to pay for it. Access to hospital and other health services is limited by the environment and infrastructure of rural places. Travel distances to care are longer, roads are poorer, and public transportation limited. Extreme cold and snow in many rural places exacerbate the travel problems in winter. There are considerably fewer primary care physicians per 1,000 population. Specialists, dentists and mental health professionals are in short supply in some rural areas and non-existent in others. Because of these urban-rural differences, models of service delivery based on urban characteristics are unlikely to work well in rural areas. It is critical to conduct health services research targeted specifically to rural areas. For example, we must develop models of long-term care, especially home and community-based services, that are appropriate to the environment and infrastructure of rural places. Furthermore, health services research must be developed to address the population density differences among rural areas, from places with small towns to remote areas which are sparsely populated. Strategies to foster technological innovation, improvements in quality, and diffusion of evidence-based care must be designed with the unique environment and infrastructure of rural areas in mind.